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Quantico, Virginia 22134-5068*

MASTER OF MILITARY STUDIES

**STRATEGY AS STORY:
JUDGMENT, BIAS, AND THE NARRATIVE BEHIND
THE DECISION TO INVADE IRAQ**

SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF MILITARY STUDIES

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Title: Strategy As Story: Judgment, Bias and the Narrative Behind the Decision to Invade Iraq.

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Thesis: At least since the end of the Cold War, United States security strategy has not typically evolved rapidly in the face of unexpected environmental shifts. President Bush's decision to invade Iraq in 2003 provides a case study of the difficulties associated with such evolution; the Administration's discourse generated a closed "September Eleventh" narrative that ultimately led to biased judgment.

Discussion: President Bush's decision to invade Iraq in the wake of the September 11 attacks was based on a flawed narrative. This narrative was a closed story in which thematic connections were made solely between existing elements. New intelligence or other information suggesting that regime change in Iraq was not an optimal path could not be integrated into this horizontal narrative. In light of this, it is worthwhile to understand how such a decision might have been reached. To this end, the work of Amos Tversky and Daniel Kahneman is invaluable. Three components constituted the decision: first, the willingness to accept risk underlies the decision process. Second, Saddam Hussein, lacking any evidence, had to emerge as al Qaeda's patron and provider of weapons of mass destruction. Third, decision makers had to assess a high probability that a nexus existed between al Qaeda, WMD and Saddam Hussein. Prospect theory, which describes how risk is calculated in questions of gain and loss, offers insight into risk. The availability heuristic, which pulls on the most readily accessible information to determine frequency or likelihood, makes the selection of Saddam Hussein understandable. The anchoring heuristic, and its associated conjunctive bias, explain the improbable linkage of terrorist, weapon and dictator.

Conclusion: This security environment made decision makers even more vulnerable to heuristic bias in the case of the Global War on Terror. Establishing open narratives which allow for a transparent exploration of the limits of knowledge and the impact of this on the application of national power limit the play of such bias.

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PREFACE

This research project was inspired by two questions: upon reading the 2010 National Security Strategy, I wondered: where is the strategy in the National Security Strategy? I read several more security strategies—and remained perplexed. Hence the second question: how does strategy, as a method to obtain freedom of action, evolve? I began with the assumption that a “secret” conversation took place behind the open-source documents; at least in the case of President Bush jr, I found no evidence to support this supposition. After discussing this state of affairs with Dr. Steven Metz and Nathan Freier, both at the National War College, I realized that I could not answer my question without recourse to cognitive psychology. The strategic process itself, I saw, was bound up in narrative constructions that articulate paradigms and connect them to observed reality. It is my hope that I have explained, in this thesis, how semi-conscious mental heuristics can interact with the need to rationally connect various objects in the observed environment to create a security community curiously vulnerable to bias.

I would like to thank my wife, Amy, and my two children—who found it amusing to watch their dad do so much homework—without my family none of this would have been possible. I also need to thank Dr. Metz and Mr. Freier. Although I had intended to just interview them, their willingness to discuss strategy far afield from what I had intended probably saved this paper; I certainly think their advice made it more useful and interesting. Finally, my sincere thanks to Dr. Rebecca Johnson—who would not let me off the hook—and LtCol Sean “Dirty” Callahan—who took nothing for granted and was never cynical.

INTRODUCTION

On March 20, 2003, joint American forces led a “coalition of the willing” through the berm separating Kuwait from Iraq, bound on a mission to topple Saddam Hussein from power. Eight years later, in 2011, most of the willing had departed. The United States remained. This fact alone spurs the desire to understand what happened. The immediate cause of the invasion had been the 9/11 attacks by al Qaeda against the Twin Towers and the Pentagon. At the time of the al Qaeda attacks, however, an invasion of Iraq was not inevitable. It therefore seems obvious to question how and why such a decision was made; but to begin the search for an answer is to realize that no such decision is ever taken in isolation, self-generated and pristine. The decision to invade Iraq exists within the context of history and U.S. strategic culture. As such, it was but the latest in a string of post-Cold War sorties, each of which has provoked its own questions. Since the first Gulf War, the United States had resorted to force multiple times.

The question of force is at the root of this investigation. America has, since the end of the Cold War, become increasingly involved in situations requiring the use of force. Historians often take the question of why a particular war was fought as a scholarly starting point. These sorts of specific questions ultimately reduce to one: why does America use force? This is not, of course, the “why” of cynicism—the why that callously implies that, beyond our own defense, the answer is “we should not.” In most cases, it is a far healthier “why.” As Bernard Brodie wrote

The fabulous changes that this span of time has seen in man’s way of life and in the environment he has made for himself are pretty nearly matched by changes in the character of war itself, both culturally and technologically. Yet it persists. Why? What function does it perform?¹

In spite of the magisterial authority of Brodie, and the very real brilliance of *War and Politics*, his question, the question of many who study American strategy, is perhaps overly constrained. Answering this question, and its nearly infinite variants, seeks to measure victory and success by

this or that course of action; yet, too often the victory of today is seen more clearly as the first step toward defeat later on. Only history can shed light on whether a state finally succeeds or fails relative to a policy or strategy. Often even history is ambiguous. In a world where states have no absolute global identity, the implications of action quickly become too complex for even the expert to disentangle. Perhaps the best hope is to seek an understanding of force as the output of a complex system rather than as a discrete cause and subsequent effect.

Accordingly, I will advance a theory that explains how strategic decisions evolve as complex acts of narrative construction. In this model, success is not dependent on outcomes in isolation—on victories in battle, at the negotiating table or in global markets—but on how well states balance and integrate the capacity to adapt to circumstance against evolution within a changing environment. Adaptation, as used here, is change in the short-term; evolution is change over the long-term. Success is measured by the time a state remains in the game with a relative freedom of action. Success, and therefore the life of the state, depends on its capacity for change, where such change is response to both circumstance and environment.

In the face of these two modes of change, United States security strategy following the attacks of 9/11 has not typically evolved rapidly in the face of unexpected environmental shifts. President Bush's decision to invade Iraq in 2003 provides a case study of the difficulties associated with such evolution; the Administration's discourse generated a closed "September Eleventh" narrative that ultimately led to biased judgment. Because the paradigm that defined the government response to the 9/11 attacks is not unique, understanding how it operates can reduce the probability of future strategic miscalculation while continuing to evolve effective strategies within a changing environment.

This theoretical approach is not intended as totalizing; there were assuredly a great

variety of forces at work during the period in which the government developed its Global War on Terror strategy. This investigation seeks to outline one significant thread within that tapestry: the way in which culture and other forms of subsidiary or subjective knowledge are connected to the empirical world of observable cause and effect. It will thus necessarily provide an incomplete explanation—but not an inconsistent one.

The U.S. decision to invade Iraq emerged from the al Qaeda attacks and the way in which they shattered the American construction of international order. For this reason, the decision offers an ideal event by which to observe strategic change under crisis. Because strategic decision-making cannot happen in a vacuum, I first establish an example of a specific U.S. attempt at evolution in the wake of the Soviet Union's contraction and collapse. Having observed just a few of the implications of a conscious effort to establish a new security paradigm, I then turn to an examination of how the 9/11 attack forced another, wholly unanticipated, strategic revolution on the Bush administration. This process, mutually destructive *and* creative, is viewed as an act of narrative construction by which the U.S. both molds and grasps the tacit knowledge held within strategic culture. The concept of "open" versus "closed" narratives develops overarching significance and is illustrated in terms of two distinct types of story telling. The fourth section explores the gaps in knowledge that the Bush Administration sought to fill through narrative. Bias operated within these cognitive shadows, revealing how a specific narrative enabled equally specific types of error to cloud decision-making. In this context, I outline three structural elements necessary to the decision to invade Iraq. The first concerns how and why Saddam Hussein became the evil genius behind al Qaeda. The second describes the error that led to the critical nexus of rogue state, trans-national terrorist, and weapons of mass destruction. The final element is the Bush Administration's pre-disposition

to high-risk options in its effort to counter the al Qaeda threat.

THE STRUCTURE OF CHANGE: TOMORROW OR 'TIL THE END OF TIME

Security strategy is a focal expression of tacit knowledgeⁱⁱ conceived of as strata, building one on top of the other, with strategic cultureⁱⁱⁱ as the bedrock. From this base, actors construct paradigms articulating the application of culture based on desire and need. Paradigms incorporate national interests, force structures and capabilities, and styles of discourse used to enact policy.^{iv} These, in turn, adapt and evolve based on circumstance and environment. Strategy emerges from these three layers as objective acts of states.

In light of this compound substrate, it is insufficient to simply acknowledge that change happens. The way in which change happens matters; to borrow from Sun Tzu, “it is a grave affair of state, a matter of both life and death.” There are two general approaches to change: adaptation and evolution. In evolution, the strategic paradigm changes. The decision to invade Iraq was closely bound up with this structural concept of change. In order to understand how, and why it should matter, the period of instability that began 13 years earlier provides a useful point of departure. With the end of the Cold War, the U.S. had struggled to redefine decades-old centers of influence. Charting a new course for NATO is representative of this challenge. The alliance’s role in a post-Cold War environment was fraught with ambiguity:

Fuzzier rationales, like the need to maintain stability, [were] less convincing. Challenged to explain the threat that NATO faced right after the Berlin Wall came down, President Bush answered that ‘the threat is uncertainty...the threat is instability’—to which his critics responded by asking, ‘how many divisions does instability have?’^v

The elder President Bush was aware not only that the Environment had changed, but that U.S. strategic pivots must perforce change as well. In struggling to make this case he was, in all likelihood, unconsciously struggling with the difference between adaptation to circumstance and

evolution within a changing environment. At stake was a critical balance; states achieve short-term optimization only at the expense of long-term flexibility. While not strictly a zero-sum situation, the reverse is also generally true.

Knowing the difference between an “environmental condition” and a “circumstance” is similar to understanding a language and knowing its grammar. In the context of strategic change, environments, as language, are the larger and more stable physical and logical structures that generate circumstances. Environments are reflected in geo-political balances of power, human demographics, climate conditions or resource distributions. Circumstances, as grammar, are those factors that temporarily change relationships between components within a stable environment. They may include everything from transient shifts in international markets to regional conflict. A very stable environment in which circumstances change dramatically over very short timeframes may appear chaotic, while a seemingly stable environment generating little circumstantial turbulence can collapse in a single catastrophic upheaval.^{vi}

To explore the competing demands of adaptation and evolution within the context of circumstance and environment, Robert Axelrod conducted a computer simulation that incorporated a programmed genetic algorithm within the context of the prisoners’ dilemma.^{vii} In his game, computer programs modeled various strategies for managing the dilemma. The genetic algorithm allowed successful programs to evolve through simulated reproduction, in which computer code describing specific responses to game behavior, in a metaphor of genetic information, was passed onto “offspring.” As the game progressed, and the various player-programs evolved, the parameters of successful play changed as well. This fact led to an observed trade-off between adaptation and evolutionary flexibility:

In the short run, the way to maximize the expected performance of the next generation would be to have virtually all of the offspring come from the very best

individuals in the present generation. But this would imply a rapid reduction in the genetic variability of the population, and a consequent slowing of the evolutionary process later on.^{viii}

This is the essence of the challenge faced by America at the end of the Cold War. The more a state invests in successful adaptation to current circumstance, the less available energy remains for future adaptation or more profound evolution.

When President Bush advanced the idea that NATO could serve as a check on instability and uncertainty, he cast NATO as evolving rather than as circumstantially adaptive. The implication of this decision was election of a particular future out of many possibilities; whether by intention or not, the logic of this evolution dictated that the U.S. would assess future challenges through reflexive reference to NATO premises.^{ix} Chief among these was a commitment to collective security and the stability of member states-- states benefitted from this model by sharing costs while magnifying capabilities. As the U.S. evolved within the world after the Soviet Union, NATO would thus inevitably exert more influence—and this could both improve and obstruct derived benefit.^x Thus, the evolution of NATO within the context of American strategic paradigms leads to new circumstances requiring new adaptive responses. NATO's struggle to manage the implosion of the Balkan states illustrates how difficult this balancing act can become. In facing this crisis, the alliance was acting far outside its charter as a mutual defense pact; at the same time, it carried forward its mandate to contain security threats (manifest as instability).

STRATEGY AS STORY

NATO was but one indication that the Bush Administration inherited a strategic revolution that had begun with the end of the Cold War. Anomalies were visible in the dissonance between the revolution in military affairs and the emerging consensus on future

conflict on one hand, and, on the other, the nature of actual conflicts and the methods used in their prosecution. Before 9/11, this revolution was unfolding in a historically consistent manner.^{xi} There was a proliferation of schools, or strategic perspectives, such as the various elements of the RMA,^{xii} the Military Reform Movement,^{xiii} attempts to redefine international institutions, rising isolationist perspectives,^{xiv} and the growing caution of practitioners confronted with rising instability in places as diverse as Rwanda, Bosnia and Haiti. This was accompanied by an increasing sense of uncertainty, expressed both explicitly, in documents such as the National Security Strategy,^{xv} and implicitly, in the shifting meanings of familiar concepts such as deterrence.^{xvi}

In order to resolve such dissonance, U.S. Strategy had to change. Recall that paradigms derive from strategic culture, and both are tacit. For this reason, they cannot be communicated directly as objective fact.^{xvii} Their effects can be observed, but the ability to communicate these observations is based on an interpretive (or narrative) act. Actors negotiate this complex transition by developing stories. Evolution and adaptation, the structural components of change, reflect the state's sense of circumstance and environment. Narrative construction brings together tacit understanding and perceptions of circumstance and environment-- resulting in a new model that, in effect, links the tacit with observable phenomena. Objectivity is thus the product of narrativity.

Understanding narrativity within strategy begins with definitions—the relationship of narrative to strategy, the types of narrative and what these constructions do to strategy. The example of NATO as a subject and product of change is revisited. The remainder of this section then follows the Clausewitzian trinity: first, the initial steps in creating a new, post-9/11 paradigm and an articulating narrative that set forth applications of strategy. Second, to

operationalize this narrative, the passions of the people are tamed and focused through the appropriation of traditional forms of American political discourse, edited to conform to the emerging strategic composition. Last, the role of the military is examined in light of the effort to manage chance and fortune through transformation prior to 9/11.

STRATEGIC PARADIGM, INTERRUPTED

How good it would be... if one could find in life the simplicity inherent in *narrative order*. This is the simple order that consists in being able to say: “when that had happened, then this happened.” What puts our mind at rest is the simple sequence, the overwhelming variegation of life now represented in... a unidimensional order.^{xviii}

Human beings love to tell stories. This predilection goes far beyond entertainment; as Frank Kermode points out, organizing facts, fears and hopes into a structure providing causal explanation helps people confront the complex uncertainties of the world. Stories are reasons, and humanity seems to require reasons over randomness. When this need leads to an impression of coherence where there is none, making useful connections becomes problematic. “The *narrative fallacy*... is associated with our vulnerability to overinterpretation and our predilection for compact stories over raw truths.”^{xix} Taleb’s assertion does an admirable job of describing how the desire for explanatory linkages affects human perception.

Narrative has a very specific meaning within the context of strategy. It appropriates the form of the story, but serves to articulate the specific application of a paradigm. In an organic and intuitive way, it is a story defining the limits of a state’s legitimate actions; barring an instance of deception, violating narrative logic leads to cognitive dissonance that must be resolved in order to continue growth.

Narratives follow two general modes of vertical or horizontal connection.^{xx} The former describes the link to other related but distinct systems of meaning or information; the latter produces linkages between elements of meaning or information contained within the narrative

itself. The horizontal mode represents a closed system in which more connections equal greater chaos. In the vertical, there is a depth of possibility because, in opening onto external systems, actors face choices, which drive real change. While the style is murkier and more ambiguous, it holds the potential for transparency—the hints, openings and depth of field allow for the honest exploration of the limits of knowledge and certainty. The parts of the narrative lacking in clarity or coherence provide moorings for new elements, for certainty that may develop. In such compositions connections receive

the externalization of only so much of the phenomena as is necessary for the purpose of the narrative, all else is left in obscurity; the decisive points of the narrative alone are emphasized, what lies between is nonexistent; time and place are undefined and call for interpretation; thoughts and feelings remain unexpressed, are only suggested by the silence and the fragmentary speeches; the whole, permeated with the most unrelieved suspense and directed toward a single goal ... remains mysterious and “fraught with background.”^{xxi}

The second type is singular. Each narrative object is carefully arranged relative to every other object. There is little desire to add to what is known because of the sense of completeness.

These narratives are carefully composed of fully

externalized, uniformly illuminated phenomena, at a definite time and in a definite place, connected together without lacunae in a perpetual foreground; thoughts and feeling completely expressed; events taking place in leisurely fashion and with very little of suspense.^{xxii}

A sense of certainty accompanies these stories, emerging out of the constructed completeness.

When there is nothing beyond or behind the “perpetual foreground,” there are few if any acknowledged unknowns; where there are no unknowns, there can be little uncertainty. In such a narrative environment there is small incentive to seek out or recognize either gaps or the knowledge that fills such gaps.

The particular example of NATO revealed how the evolution of certain key Cold War strategic arrangements sought to capture, by re-imagining threat, constructs of enduring utility

such as containment, mitigation, and deterrence. Tying these ideas to limiting instability and uncertainty virtually ensures a vertical and open narrative. This narrative activity took the form of a structural revolution, as indicated by the dissonance between prevalent modes of conflict and pervasive trends in technological military development and discourse. The rationale behind the continued existence of NATO was not always clear, and depended on creative applications of its charter. Its evolution was part of a developing open narrative. Ultimately, the revolution was incomplete on 9/11, and the subsequent scramble to complete and recreate a viable paradigm is the focus of the remainder of this thesis.

POLICY IN STRATEGY

In November of 2001, almost two months after September 11, the Director of the CIA, George Tenet, met with the National Security Advisor, Condoleezza Rice, and Vice President Dick Cheney. During the meeting, Tenet recounted a discussion between Pakistani scientists and al Qaeda leadership that took place in August of 2001 around a campfire in Afghanistan. The Vice President listened and eventually offered this guidance: “If there’s a one percent chance that Pakistani scientists are helping al Qaeda build or develop a nuclear weapon, we have to treat it as a certainty in terms of our response.”^{xxiii} Throughout the period, Steven Hadley, the Deputy National Security Advisor, relentlessly sought the CIA imprimatur on the story of an al Qaeda-Iraq connection. This effort is paraphrased below:

Aren’t these potential threats precisely why an invasion is necessary? Is there even the slimmest possibility—a one percent chance—that uranium was bought in Niger, that the aluminum tubes were usable in uranium centrifuges, or that Mohammed Atta managed to meet with an Iraqi, any Iraqi, in Prague?^{xxiv}

In both of these accounts, the actors, unconsciously or otherwise, struggle with the well-documented problem of induction: since one can rarely observe every variable that may be associated with the specific field of observation, there is always the possibility that the next

observation will invalidate the conclusion. In the present case, inductive anxiety seems to arise from sensitivity, felt in the aftermath of the 9/11 attacks, to the immanence of Black Swan events.^{xxv} This sensitivity led members of the administration to shift the source of validation for inductive propositions. Instead of the accumulation of supporting observation, they would use perceived threat; the greater the danger, the more confidently the government would act.

This explains the use of possibility and probability within the various agencies charged with waging the war on terror. Cheney's statement and the NSA's enquiries are not false. They are statements of probability, and probability does not address truth-value; the narrator is not making an assertion of truth, but revealing a relationship between himself and his level of confidence in an outcome.^{xxvi} Cheney does this by crafting a simile in which the worst imaginable scenario must be treated *as if it were* a certainty. His narrative play suggests that he requires the feeling of certainty but not certainty's empirical basis. The NSA asks if the CIA's null-hypothesis, an alliance between al Qaeda and Iraq for the purpose of targeting the U.S. with weapons of mass destruction, might not exceed the threshold of significance. Indeed, while each statement or question embodies an intuitive dread of the Black Swan, each circles the problem of induction in a different way. The Vice-president invites his audience, and the government, to enter a world in which Black Swans are the norm and where the white have become anomalous. The NSA's line of enquiry seeks to establish a sense of statistical significance without suggesting how to legitimate such an intuition. Under this model, the null-hypothesis flips and signifies the probability that an attack *was not* coming. This possibility is allowed to approach 99% without restricting freedom of action relative to the 1% hypothesis that an attack *was* coming.

The President embraced the narrative of the Black Swan, of the rare, catastrophic outlier.^{xxvii} Like his Vice President and National Security Adviser, he sought to constrain the

awful, quasi-divine awe of the true Black Swan. If Dick Cheney tried to tame probability with a narrative device, George Bush sought a very different path—one that is at once heroic, agonizing and flawed. He began by focusing on the necessity to act when in the certain presence of the conjunction of a terrorist and a weapon of mass destruction:

The gravest danger our nation faces lies at the crossroads of radicalism and technology... As a matter of common sense and self-defense, America will act against such emerging threats before they are fully formed... we must be prepared to defeat our enemy's plans... History will judge harshly those who saw this coming danger but failed to act. In the new world we have entered, the only path to peace and security is the path of action.^{xxviii}

The sense of standing in the dock of history was a powerful motivator within the overarching storyline. Condoleezza Rice would repeat it almost verbatim:

The danger from Saddam Hussein's arsenal is far more clear than anything we could have foreseen prior to September 11th. And history will judge harshly any leader or nation that saw this dark cloud and sat by in complacency or indecision.^{xxix}

The desire to shorten the time between the formation of an adversary's intent and the U.S. response is palpable; the reference to Sun Tzu is no accident. Attacking plans pushes the state's response closer to the moment the enemy *decides* to attack. Action at this point necessarily affects the enemy *before* the enemy has affected the state. 9/11 was a horrible lesson in the value of this approach: to wait for the unfolding of a threat was to risk losing thousands of innocents.

The President continued by deciding, on 9/11, that the U.S. would hold nations that harbored terrorists responsible for the actions of those terrorists; this was the thematic element that opened the door to invasion.^{xxx} The President's preference was always to act: before the enemy tactically, and consistently faster operationally—even if the name and nature of the enemy was not always objectively verified. Since the President had already determined that the perception of danger was the primary justification to act, it followed logically that the closer in

time to the perception, the more effective the attack.

Perception would guide action. Through constant action, terrorist designs would never mature.^{xxx} Those who helped terrorists would become targets of American retribution. These were the core paradigmatic elements of post-9/11 strategy. The narrative origin of the Bush use of preemption and prevention thus originated in the same desire to tame the Black Swan that motivated the Vice President; as George Bush later wrote, “The nature of history is that we know the consequences only of the action we took. But inaction would have had consequences, too.”^{xxxii} To avoid these latter consequences, the United States would become the Black Swan.

PASSION IN STRATEGY

Walter Russell Mead’s thesis in *Special Providence* is that, “whether due to luck, skill, or the Providence of God, the record of American foreign policy is overall a successful one.”^{xxxiii} During “normal” time, it is an integrated reflection of several democratic themes, which allows for vertical connections. Foreign policy is not a single, closed, temporally flat system. Multiple inputs allow it to adapt and evolve; history provides a layered sense of time. By connecting various constituencies within the Republic, new ideas are brought into currency and government hears voices of dissent both within its branches and from the people.

American democracy has long worked from the premise that authority for foreign policy is diffuse.^{xxxiv} It is a great brawling riot intended to protect economic interests, finance and local concerns. So when, during the 2000 election, Dr. Condoleezza Rice wrote that the Clinton Administration failed to develop an adequate security posture, her article played into a long tradition of partisan election year finger-pointing and general doubt as to the patriotism and competence of political adversaries.^{xxxv} While it is unlikely that President Clinton will be remembered as a builder of armies, the state of the military was not so dismal that less than a year after his election, President Bush could not launch an unanticipated war in one of the

planet's remoter regions.

At the same time, Dr. Rice's article set the tone for change within the U.S. approach to foreign policy. President Bush would seek a more muscular and activist foreign policy—even though initially favoring a cautious realism.^{xxxvi} This is another example of a kind of narrative consistency. The proclivity for action was already evident during the Bush candidacy. It should not be unexpected that during a time of crisis, this tendency would come to dominate the President's outlook. (Which is not to say that there might not have been other competing narratives in operation at the beginning of the war.) What is most relevant to understanding the development of the Bush narrative is that the preference for action from a position of material strength was first articulated in the form and the arena of ideological competition.

Following 9/11, policy-makers struggled to visualize change in a radically new context; for the Bush administration, this opened a vista on the world Nicholas Taleb has dubbed "Extremistan."^{xxxvii} This was the natural home of the Black Swan. Outcomes in this new world were scalable—the bell-curve was not trustworthy—so that one event often exerted more influence than a thousand other similar events combined. Even as the Bush Administration tried to understand this new place, it had to evolve the ways and means that would allow the nation to thrive in Extremistan's uncertain spaces. To facilitate this trip, the government composed along two related themes. The first was leveraging traditional ideological communication—but in the service of building cohesion, a super constituency, rather than the election-year partisan base. The second was to generate a shared model by splicing probability-as-trope into recognizable forms of strategic discourse. These two actions, written as sub-text, served to control and channel popular passions.

President Bush and his close advisors maintained the form of ideological dissent, but

used it in a manner suited to their particular struggle. The administration suggested that, in the face of 9/11 and the immanent threat of terrorists, rogue states and WMD, dissent could only evolve from special interests:

The president believes that this is a time for unity of the American people's representatives and it's Executive Branch, which is why he made the decision to go to Congress for the resolution to support - American activities to deal with the threat of Saddam Hussein... the president said that some Senators had had a tendency to put special interests ahead of national security and he went on to praise Democrats and Republicans who were pulling together on the security issues that face the American people.^{xxxviii}

Statesmanship requires, according to the National Security Advisor, endorsement of the Executive Branch's narrative. Restraint was the essential mobilization of the people required within the administration's narrative logic, and this story, by its structure, could not withstand debate. Such activity would imply that the consensus level of confidence remained in play; since the roots of the Bush narrative structured induction, probability, and certainty so that strategy was formulated *as if* knowledge was complete, any debate was therefore suspect.

As the administration developed the new paradigm, ambiguity and uncertainty were rarely if ever visible. An example of this narrative trend is available in discussions of weapons of mass destruction and, more specifically, Iraq's alleged purchase of precision aluminum tubes. Note that nowhere in the discourse does the administration express anything less than certainty about Iraq's pursuit of weapons of mass destruction:

You will get different estimates about precisely how close he is. We do know that he is actively pursuing a nuclear weapon. We do know that there have been shipments going into... Iraq, for instance, of aluminum tubes that really are only suited to—high-quality aluminum tools that are only really suited for nuclear weapons programs, centrifuge programs.^{xxxix}

Consider how different the focal content of these remarks would feel if, instead, the actor were to say, "We do *believe* that he is actively pursuing a nuclear weapon..." If there had been no dissent,

this would be a moot point. In fact, the National Intelligence Estimate of October 2002 reveals that the State Department disagreed with the Central Intelligence Agency; the Department's Bureau of Intelligence and Research did not believe the tubes had anything to do with nuclear centrifuges.^{xl} In spite of this, none of the public, open-source documents from this time reveal anything less than surety that Iraq had an active nuclear weapons program. Years later, in his memoirs, George Bush wrote, "I believed that the intelligence on Iraq's WMD was solid."^{xli} Further, true deception would require certainty; the administration did not have certainty: They did have a paradigm that said the best match between concept and reality was found by focusing on magnitude rather than probability, where a high magnitude functions *as if it were* certainty.

FORTUNE IN STRATEGY

At a June 2002 meeting of NATO senior leaders, in answer to a question about previous comments that the threat from the nexus of rogue states and weapons of mass destruction was far more serious than most people imagined, Secretary Rumsfeld said,

There's another way to phrase that and that is that the absence of evidence is not evidence of absence. It is basically saying the same thing in a different way. Simply because you do not have evidence that something exists does not mean that you have evidence that it doesn't exist. And yet almost always, when we make our threat assessments, when we look at the world, we end up basing it on the first two pieces of that puzzle, rather than all three.^{xlii}

Rumsfeld's statement is, in fact, a tautology-- the language used means it is not possible for it to be anything *other* than true.^{xliii} The Secretary of Defense's remarks amount to an explanation of the role of the black swan: a lack of knowledge does not say anything conclusive about absolute reality. Reality can thus surprise the most vigilant watchman. Based on this understanding, he then proposes to incorporate "unknown unknowns" into his schema of "known knowns" and "known unknowns."^{xliiv} The secretary sought to target not just known threats or conceivable threats, but any possible emergent threat. Rumsfeld was going after Black Swans. His

understanding of the government narrative was very similar to that of the Vice President.

The power of this particular narrative to proscribe connections to external sources of understanding is perhaps most evident within the defense community. In 1999, three-and-half years before 9/11, CENTCOM conducted a study to examine the likely aftermath of regime collapse in Iraq. The results are in many ways prophetic. (*See Appendix A for the Executive Summary of this study*) During a 2011 discussion with LtGen (RET) Paul Van Riper, USMC, he recounted how, over the course of 2002 as the invasion plan was evolving, Gen (RET) Anthony Zinni asked GEN Tommy Franks how the results of Desert Crossing were being integrated into the planning. GEN Franks was vague on his knowledge of the document. The interesting thing about this story is that at the time Desert Crossing was conducted, then LTG Franks had been the Army Central Commander under GEN Zinni, the Commander of Central Command.

While one could rebuke GEN Franks on the grounds that he should have aggressively surfaced this study during the planning of Operation Iraqi Freedom, it is probable that Desert Crossing was not factored in because there was no way it could be introduced. The entire narrative under construction at this time was built upon a deep sense of certainty—the belief in solid intelligence and valid insights into adversary intentions. In such an environment, introducing an outdated study would have seemed irrational. The document would likely have “dropped off the radar” of senior leaders altogether. It is the power of narrative construction to shape reality that makes it such a significant driver of strategy formulation.

FIRST CONCLUSION: THE NARRATIVE BASIS

Stories function as bridges between sources of tacit knowledge and objective reality; experienced as the tension between adaptation and evolution, they set inversely proportional bounds on flexibility and optimization. The family of statements clustering around issues of judgment, uncertainty, and Black Swan events, in their very pervasiveness and variety, therefore

reveal a central element of the Bush Administration's narrative. Following 9/11, President Bush and his key advisors constructed strategy around a narrow set of themes that guaranteed a recursively-oriented assessment of future circumstances. It is in this context that their problematic use of induction becomes interesting. In the post-9/11 environment, themes such as “action,” “possibility,” and “certainty” functioned as strange attractors^{xlv} within a structural dimension that powerfully curbed future adaptation. The more “unguessable” an event, and the greater its destructive magnitude, the more it served to orient and shape strategic decisions. Once the President and his senior advisors settled on this narrative, the themes that followed made it very hard for decision-makers to integrate, or even see, new information or competing narratives.

When the Vice President suggested that action must be taken regardless of the statistical significance of a null hypothesis, he effectively asserted that the perception of a threat reasonable in conception was its own justification for action. When the President himself said, “to forestall or prevent such hostile acts by our adversaries, the United States will, if necessary, act preemptively,”^{xlvi} he raised Cheney’s supposition to the level of policy; in light of unimaginable threat to the American people, perception became the basis for just war. To act solely on the basis of perception placed the actors within a narrative of horizontal connections.

Because of the pervasive belief that the government should *not* allow a null hypothesis to check or change the security narrative, officials developed an extremely high threshold of awareness when it came to dissenting voices and the question of invading Iraq. Likewise, when fear of the black swan led the government to plan almost entirely in terms of these most unlikely outcomes, the many sources of understanding that might have led to reappraisal were discarded almost before they could surface. In essence, the Administration adopted a narrative in an

environment, and at a time, of intense fear and uncertainty-- and then restricted the ways in which new knowledge could enter the system to generate new understanding. Ironically, it was just this kind of infusion that might have alleviated the strategic energy deficit resulting from the closed narrative.

The policies that emerged from this narrative after 9/11 marked a clean break with the proto-paradigm of the 1990s and before. During the Cold War, NATO and the U.S. had known precisely who the threat was, but could do little more than guess at its intentions.^{xlvii} In the post-Soviet 90s, instability was perceived as the threat; the paradigm of collective security, and thus NATO, maintained relevance by evolving to counter this danger even as emerging intentions were no longer existentially threatening. On 9/11, the nature and extent of the threat suddenly went opaque even as its intention reached perfect clarity. For the only time in its history, member states accordingly invoked article 5 of the alliance charter; NATO aircraft took to the sky to help America defend against further attacks.^{xlviii} But this organization's post-Cold War evolution was based on limited uncertainty-- additive and obedient to the bell curve. The shock of 9/11, and the specific way in which it reflexively shifted strategic thinking into the borderlands of Extremistan, was incommensurate with NATO's open, vertically oriented narrative of limited risk within a framework of collective security. NATO would continue to stand with the U.S. in Afghanistan, but the decision to invade Iraq would expose one of the most significant strains in the alliance's history.

The threat environment had thus evolved in a historically normative way until, in a seismic lurch, it became simultaneously very mysterious and very unpredictable. The nation's leaders met this change by constructing a narrative of comprehension out of a re-imagined sense of probability that generated a closed, horizontally connected story. Because the structure of this

narrative favored action over insight, it exhibited a strategic preference for Black Swan behavior on the part of the United States. The resulting potential for preemptive action aimed at strategic surprise was achieved at the expense of a more objective understanding that could have arisen only through a more open narrative. Since debate necessarily denied certainty, the narrative form appropriated traditional types of American ideological discourse in order build unity and stifle dissent. The capabilities-based force that coincidentally evolved alongside NATO was developed on a model of absolute overmatch; it was not optimized toward any single threat but was intended to make possible the use of speed, precision and networked systems to overwhelm *any* adversary. The Secretary of Defense had, in fact, made it very easy to mobilize U.S. Military power against Black Swan-class threats.

COGNITIVE BIAS: WHAT HAPPENS IN THE GAPS

Candidate George W. Bush pondered the feasibility of some truly decisive end game with Iraq even before he was elected.^{xlix} In spite of this, the first months of his presidency were characterized by a restraint reminiscent of his father's approach to foreign policy. This changed after 9/11. There was a risk that the public would perceive al Qaeda's attack as so random in execution, and so destructive in nature, that it represented a new type of danger from which the government could not defend the nation. A key part of the administration's response involved confronting the collapse of strategic paradigms by generating a new narrative to express new theories, concepts and applications. The goal was to focus anger and fear by explaining the threat and depicting it as vulnerable to American power. The nature of this narrative was such that, as the magnitude of the threat grew, the administration increasingly treated possibility as certainty. At the same time, strategic discourse was structured to minimize dissent-- which followed logically from the government's employment of certainty. This closed narrative was

vulnerable to errors in judgment because it resisted both perception and integration of new facts. Describing the structure of a narrative form, however, does not account for how errors actually emerge within the decision-making process. The Bush Administration's decision to invade Iraq provides a case study for how such errors arise in practice.

Cognitive biases grow out of heuristics, or mental short cuts, common to all human beings. This section examines how such biases arose to influence national strategy. The events of 9/11 paralyzed the United States and shattered nascent strategic paradigms. Ultimately, this shock generated a fixation on Black Swan events—radical outliers that cause disproportionate change and are, by their nature, unpredictable. The Bush narrative re-constructed the process of inductive reasoning on an intuitive level and in response to the horror of the al Qaeda attacks of 9/11. Because of the structure of this narrative, actors were not able to adapt to new observations; various biases were able to shape decision-making in a way that made the decision to invade Iraq almost inevitable. This decision was based on three central elements: (1) Determining the identity of the state actor most likely to aid trans-national terrorists. (2) A belief in the nexus of terrorism, rogue states and weapons of mass destruction. (3) Acceptance of a high-risk method (invasion) as the best way to neutralize the threat. Lacking observational inputs, distinct types of bias shaped each of these elements in specific and important ways as the Administration struggled to define and operationalize a new security paradigm.

STRATEGIC SHOCK

By its nature, a Black Swan cannot be predicted using standard analytical tools. If it could be predicted, such an event would cease to be a radical outlier. From this perspective, the Bush Administration's tendency to abandon standard analytical tools is an act both brave and necessary. In its place, however, the administration adopted the concept of magnitude in order to orient security strategy. While this ensured that any possible threat would receive an

overwhelming response, it severely limited the ability to observe objectively emerging conditions and orient national power based on changing circumstances. It is this simple trade-off between continual observation and integration versus speed and a trip-wire readiness that opened the way to bias. This approach developed out of the shock generated by the 9/11 attacks.

To borrow a concept developed by Nathan Freier, the speed and extent of the destabilization that occurred on September 11 constituted a strategic shock.

“Strategic shocks manifest themselves as sudden surprises to DoD’s collective consciousness. They pose grave risks—perhaps even lasting and irreversible harm—to one or more core security interests... shocks force sudden, unanticipated change in DoD’s perceptions about threat, vulnerability, and strategic response.”ⁱ

The attacks achieved a shock effect because, in spite of an increasingly uneasy intelligence community, the nature and the scale of the strikes, when they came, were largely beyond prediction.ⁱⁱ These events constituted an anomaly of catastrophic proportion and, in its wake, strategists were compelled to abandon the various conceptual frameworks extant prior to the attack. The set of considered threats, mostly of uncertain origin but predictable magnitude, was one of the first casualties of this shift. The attempt to rapidly construct a new paradigm in an environment experienced as time-competitive suggests a powerful explanation for why the Administration’s thinking developed as it did.ⁱⁱⁱ

On January 29, 2002, President Bush delivered his State of the Union Address. This speech is remembered for the memorable “Axis of Evil” description.ⁱⁱⁱⁱ Of this passage Bush said, “The axis I referred to was the link between the governments that pursued WMD and the terrorists who could use those weapons.”^{liv} In this same speech, based on the quantitative emphasis of Iraq relative to North Korea or Iran, it was apparent that the President felt the greatest threat from Saddam Hussein. The linkage of trans-national terrorists with WMD

proliferation drove security policy after 9/11. Iraq was cast in the role of al Qaeda's WMD provider. This is not a random composition, but an example of predictable evolution.

In seeking the sources of this particular theme, Iraq's violation of U.N. Sanctions is a good starting point. Saddam Hussein's behavior contributed to his looming presence in the minds of U.S. policy makers; while flouting sanctions may or may not have provided a solid legal cause for military action, Hussein's flagrant disregard was definitely not the reason the U.S. targeted the country for invasion. As late as September 12, 2002, President Bush stated, before the U.N. General Assembly, that "our greatest fear is that terrorists will find a shortcut to their mad ambitions when an outlaw regime supplies them with the technologies to kill on a massive scale." The tipping point for the decision to go to war was clearly the nexus of trans-national terrorists, weapons of mass destruction and rogue nations.

A CRIME IN SEARCH OF A CRIMINAL...

How did Saddam Hussein become the dictator required by the plot? Iraq was clearly a threat—but there were other threats and more dangerous, as Ron Susskind observes: "many dictatorships—from North Korea to Iran to Pakistan—had much more destructive arsenals than Hussein was rumored to possess."^{lv} While clearly a threat, Saddam Hussein was largely contained in 2002;^{lvi} other "axis of evil" states were not. These un-contained countries should have represented relatively greater threats—but did not.

There are situations in which people assess the frequency of a class or the probability of an event by the ease with which instances or occurrences can be brought to mind... Suppose one samples a word... at random from an English text. Is it more likely that the word starts with r or that r is the third letter? ...Because it is much easier to search for words by their first letter than by their third letter, most people judge words that begin with a given consonant to be more numerous than words in which the same consonant appears in the third position. They do so even for consonants, such as r or k, that are more frequent in the third position than in the first.^{lvii}

The Iraqi dictator was very easily "brought to mind." Saddam Hussein had suffered one of the

most decisive defeats in modern history, but had then managed to defy the terms of his surrender for 10 years. He had sanctioned the attempted assassination of the senior Bush. He had used weapons of mass destruction more than once—and he had split the coalition that originally defeated him.^{lviii} When the likelihood of a threat or event is estimated on the basis of how easily the outcome is conceived, decision makers are operating within the domain of the availability heuristic. This is a useful mental shortcut for making quick inferences but because it often uses variables other than probability and frequency it is prone to predictable biases. Saddam as purveyor of WMD maps neatly onto such a bias: “When the size of a class is judged by the availability of its instances, a class whose instances are easily retrieved will appear more numerous than a class of equal frequency whose instances are less retrievable.”^{lix} Hussein's multiple attacks and attempts at subversion of U.S. interests magnified Iraqi presence.

The speed of the President's judgment supports this notion. Less than two weeks after the September 2001 attacks, the President already suspected some form of Iraq-al Qaeda connection.^{lx} Considering the absence of corroborating evidence, availability-derived biases do much to explain how officials tied one crisis event (al Qaeda attacks) to a separate and unconnected threat (Saddam Hussein), as well as the rapidity and durability of this linkage. The fact that President Bush was considering how to execute regime change in Iraq even before the ouster of the Taliban were from Afghanistan^{lxi} only lends further credence to an availability-related bias—Saddam Hussein was literally “in the air.”

An experiment recounted by Tversky and Kahneman explains how the heuristic bias could have enabled the President's thinking:

In an elementary demonstration of this effect, subjects heard a list of well-known personalities of both sexes and were subsequently asked to judge whether the list contained more names of men than of women. Different lists were presented to different groups of subjects. In some of the lists the men were relatively more

famous than the women, and in others the women were relatively more famous than the men. In each of the lists, the subjects erroneously judged that the class (sex) that had the more famous personalities was the more numerous.^{lxii}

In this example, previous knowledge of a name facilitates a perception of high frequency.

Saddam's name had been near the center of U.S. security concerns for over 10 years— with two presidents contemplating his ouster. He had successfully and decisively divided the U.N. Security Council after flouting its sanctions. Neither Kim Jong Il nor Iran had drawn this degree of continuous and concentrated attention. This fact increased the likelihood that Saddam Hussein would emerge to satisfy a plot requirement.

"THE NEXUS AND THE WMD:" A MASTER NARRATIVE

In order to make the decision to invade, the administration needed the perceived stimulus of immanent danger. Such a stimulus evolved out of the specific alignment of three narrative elements—trans-national terrorists, weapons of mass destruction, and a dictator. By the inductive standards of "normal" time, this was a highly unlikely conjunction. Barely a week after 9/11, while the emerging paradigm was still fluid, Bush had questioned Richard Clarke^{lxiii} about a possible linkage; "Clarke had said definitively there'd be no connection found—this was clearly al Qaeda, and al Qaeda and Saddam were natural enemies."^{lxiv}

Outcomes such as Iraq selling or giving WMD to al Qaeda, where multiple variables must crystallize in a certain pattern, are called, "Conjunctive events, such as drawing a red marble seven times in succession, with replacement, from a bag containing 90 percent red marbles and 10 percent white marbles..."^{lxv} The inverse situation, where the decider considers one low-probability outcome over the course of a series of iterations, are, "disjunctive events, such as drawing a red marble at least once in seven successive tries, with replacement, from a bag containing 10 percent red marbles and 90 percent white marbles."^{lxvi} Both types of event fit under the umbrella of the *anchoring heuristic*.^{lxvii} Anchoring biases distort a subject's sense of

probability relative to the likelihood of compound events. As a result, “Even when each of these events is very likely, the overall probability of success can be quite low if the number of events is large.”^{lxviii} For a conjunctive event, the anchoring heuristic leads the subject to gauge the overall probability of the sequence by the probability of the initial event.^{lxix} Tversky and Kahneman demonstrated this phenomenon as follows:

Subjects were asked to estimate various quantities, stated in percentages (for example, the percentage of African countries in the United Nations). For each quantity, a number between 0 and 100 was determined by spinning a wheel of fortune in the subjects’ presence. The subjects were instructed to indicate first whether that number was higher or lower than the value of the quantity, and then to estimate the value of the quantity by moving upward or downward from the given number. Different groups were given different numbers for each quantity, and these arbitrary numbers had a marked effect on estimates. For example, the median estimates of the percentage of African countries in the United Nations were 25 and 45 for groups that received 10 and 65, respectively, as starting points. Payoffs for accuracy did not reduce the anchoring effect.^{lxx}

In the aftermath of 9/11 and the American response, al Qaeda sought weapons of mass destruction—this was very close to certain. Second, Saddam Hussein had weapons of mass destruction; this was somewhat less likely but most analysts believed he did retain some capability.^{lxxi} Third, Iraq was working with al Qaeda and would provide them weapons of mass destruction; this is the key supposition in the chain—but there was scant information by which to establish a reliable level of confidence for this event. Finally, al Qaeda would use WMD against the U.S. Because the first two events were nearly certain, they exerted an influence on what followed; the high-probability first term in the sequence “anchored” the following terms. Various key leaders, already inclined toward acting on the basis of perception of magnitude, saw these last two premises as high-probability in light of the established likelihood of the first two terms. Having created the possibility of a connection between the terrorist and the dictator, it is almost inconceivable that senior leaders would *not* overestimate its probability.^{lxxii} The strategic

narrative had primed decision-makers to seek a state ally for al Qaida, and the paradigm required action against any possible Black Swan.

Note that “probability” is not applicable to this scenario in strict logical terms; the Government either knew Saddam’s intentions or they did not. The most one could accurately ascribe was a level of confidence at least partially subjective. Mathematical probability is not necessary to the function of bias. The important point regarding the assertion of the role of conjunctive bias is that the first event, nearly certain, established the basis for evaluating further linked events—and this is so even when the probabilities are unrelated to the probability of the prime event.

FRAMING DECISIONS, CHOOSING PROSPECTS

The belief in the nexus of terrorism, rogue states and weapons of mass destruction, coupled with the availability of Saddam Hussein, provide critical pieces of the narrative, but they do not explain why invasion was the method finally selected to manage the threat. The decision to invade was made *as if* an Iraq-facilitated al Qaeda attack were a certainty. This environment generated a sense of profound risk, and “decision making under risk can be viewed as a choice between prospects or gambles.”^{lxxiii} Tversky and Kahneman found that decision-making in such conditions conforms to well-documented patterns of probability-defying behavior. The researchers found that “choices involving gains are often risk averse and choices involving losses are often risk taking.”^{lxxiv} In terms of outcome, the Bush Cabinet faced a choice between certain loss of civilian life versus merely possible loss of civilian life.

The Bush Administration was certain that if the U.S. did nothing, more Americans would die: In a December 2002 meeting with Spanish President Jose Aznar, Bush said “Saddam Hussein is using his money to train and equip al Qaeda with chemicals, he’s harboring terrorists.”^{lxxv} As for al Qaeda, they had already developed further plans to attack the U.S. again

in the aftermath of September 11th.^{lxxvi} If instead the country acted to break apart the conjunction of Iraq and al Qaeda, then an unknown quantity of people *could* die and the nation would incur some unknown material cost.

Certain loss is usually less acceptable to deciders than a possible loss and in confronting Saddam Hussein, the administration increasingly echoed the Vice-President's assertion that "the risks of inaction are far greater than the risks of action."^{lxxvii} The startling finding of prospect theory, and the most relevant for understanding strategic decision-making, is that opposed outcomes need no grounding in existing mathematical probability—the perception of emergent loss creates the bias toward riskier behavior.^{lxxviii} The way in which perception shaped a biased sense of risk completed the narrative congruence of judgment under uncertainty.

The accepted narrative offered a choice between certain and possible losses. Having already decided that magnitude of risk, rather than the accumulating weight of knowledge, was the necessary pre-condition for action, lack of proof would not constrain choice in the dangerous terrain of Extremistan. Thus risk assessment based on mathematically validated probability or strength of intelligence was no longer a valid methodology when confronting the biggest threats—and the skewed probability of prospect theory selected for higher risk options.

SECOND CONCLUSION: THE IMPACT OF HEURISTIC BIAS

Three elements were essential to the decision to invade Iraq: The selection of Saddam Hussein, the nexus of terrorism and dictatorship, and the acceptance of high-risk behavior. There was no logical or mathematical basis for the form any of these three things ultimately took—there was no information confirming them or strong intelligence suggesting them. In each, a heuristic, a kind of mental shortcut common to every human being as an opposable thumb is common, scripted portions of the administration's story in such a way that narrative logic activated specific biases in judgment. These biases then determined how the specific

invasion narrative developed between 9/11 and December 2002. Saddam Hussein was the dictator most easily brought to mind, and lacking any more compelling selection criteria, the availability bias provided an answer based on this ease of recall. George Bush perceived the greatest threat to U.S. security as operational cooperation between a rogue state and al Qaeda involving weapons of mass destruction. The anchoring bias meant that near certainty regarding the terrorists' desire to obtain WMD strengthened the administration's confidence that such cooperation was occurring even without a more directly observable cause. Finally, the effect of the other two biases was to convince officials of the need to act as decisively as possible to mitigate the impending certainty of a civilian death toll. This predisposed the President towards high-risk options in accordance with the expectations of prospect theory.

Invasion thus became increasingly likely as heuristic errors accumulated. Cognitive biases operate where circumstances conspire to obscure facts. Biases trick the mind into a sense of "knowing" by masking actual causality and probability beneath the effects of misapplied shortcuts. Thus, for example, decision-makers conceived of the nexus of terrorists, rogue states and WMD as a single event, when in reality it was a complex event in which many possibilities had to condense around a common narrative thread in order for the feared circumstance to crystallize. It was therefore the way in which the problem was framed that created the bias-induced distortion.

Strategic shock suspended the more deliberate framing processes of life within the disciplined confines of bell-curve-obedient threats. When the 9/11 attacks shattered the still-developing paradigms of the early post-Cold War era, the President and his close advisors were left without a model for orienting a response. The President had only the responsibility to protect the populace as an axis around which he could begin building a new conceptual frame.

The Administration thus oriented the state toward the worst-case scenario-- and in the immediate aftermath of the al Qaeda attacks, this posture led directly to the three themes that both enabled and generated cognitive biases.

This orientation in turn drove the perception of change down the path of adaptation. Each of these biases could only operate when abetted by a precisely articulated circumstance: identification of the cooperating rogue state, operational cooperation between threats, and a predisposition toward high-risk options. As previously shown, the accuracy of the circumstance was not as important as the emotional content of the perceived threat, arising from the merger of the unknowable with increasing magnitudes of destruction. This narrative was one of action—it precipitated the decision to invade Iraq. Although Black Swan events had profoundly undermined the government's sense of the nature of the global system, at the same time, the field of change—the security environment itself—was treated as stable for the purposes of constructing the narrative that explicitly led to the decision. This strategic confusion was largely generated by the way in which certainty was constructed within the narrative of comprehension—a construction that obscured observation and thus encouraged bias as a way to compensate for lack of clarity within the narrative of action.

NARRATIVE COGNITION

The decision to invade Iraq was but one of many possible responses to the 9/11 attacks. Confronted with multiple options, which were available even if not explicitly articulated or explored, a particular set of initial conditions led the government to the conclusion that invading a specific country was the best way to counter al Qaeda and prevent another spectacular attack. This essay has accordingly presented a synthesis of ideas drawn principally from literary criticism, the philosophy of science and cognitive psychology— influenced by logic, probability,

nonlinear dynamics and evolutionary biology. From its beginnings, the United States moved within the global field under its particular auspices of personal liberty, manifest destiny and a desire to expand commerce.^{lxxix}

The unique domestic conditions that generated America's particular socio-cultural-political character both determine what decisions are feasible and how the government should translate such decisions into action; they are metaphorically similar to the process of stellar fusion. In the collision and interaction of their internal forces, they determine America's international form. This form is visible as the sum of the nation's strategic decisions. These decisions encourage one of two types of transformation: they either serve to adapt existing strategic architecture to a specific set of circumstances or they drive the holistic evolution of the state in response to changed environmental factors. Adaptation is thus based on the desire to optimize efficiency or gain relative to circumstance, while evolution is based on the need to respond to change in external pressures over a longer time-span. The former is highly attuned to choice and the attainment of specific outcomes, while the latter is sensitive to the sustainment of sovereign integrity. Of course, within a specific transformational structure, the nature of change is tremendously varied—but this species of variation has little impact on the present investigation.

The knowledge and understanding that coalesces around a specific perception in the development of a strategic decision is a tacit aggregate of the various cultural, political and demographic forces operating within the country at a given time. In itself, it is not objective and is necessarily subject to interpretation by any concerned actor. Such knowledge, while of profound significance, is thus only marginally useful in framing an actionable decision. States are thus compelled to construct narratives that articulate the mode of change, its history,

direction and purpose. In telling stories, government's access cultural knowledge, integrating these components and reconciling them to external, observed reality. Such a narrative act profoundly influences such worldly requirements as resource allocation and respect for international norms and institutions. This theory traces a path from the bedrock of strategic culture, through the construction of paradigms, to the way in which a state's understanding of the international environment is constructed and, ultimately, operationalized in a decision.

There is predictive power in this vision. As a state enters a period of significant change, the observer should expect that state to begin articulating two narrative forms. The first is suggestive of paradigmatic organization. It should describe its shifting perception of international causality—of the relationships between various actors and circumstances. This first narrative form will, at a minimum, provide a description of how the state sees the change (as threat or opportunity) and the relationship of the state to the source of change. This narrative mode orients the state to its environment. The other mode is circumstantial in its structure; this story will identify specific actors and the linkages that connect them to each other and the threatened state. If the first form is a narrative of comprehension, the second may be considered a narrative of immanent action.

The observer evaluates these narratives in terms of several levels of consistency. Each narrative mode should fit into the historical ideals, recorded beliefs and behaviors of the state. This cultural consistency is indicative of the state's ability to maintain equanimity in the face of its decision, regardless of outcome. Each narrative mode must also synchronize with the other; the way in which the environment is comprehended must not logically contradict the narrative of action or vice versa. In other words, a narrative of comprehension that articulates peace and negligible threat would be incommensurate with a narrative of action that oriented the state

constructing the various narratives toward highly chaotic and violent behavior. This internal consistency is indicative of the state's ability to practice the classic strategic art of balancing ends with ways and means. A third form of consistency is that of outcome. Since a state's global interactions are directed towards the maintenance of an energy surplus, an effective narrative should lead a state through a period of change in such a manner that the state is stronger following the transformative event. The better the state maintains a balance between decisive action and the integration of new information and higher paradigms, the more likely the state is to, in fact, emerge stronger following a time of intense international engagement. Accordingly, one should look for a very open narrative of comprehension and a more closed narrative of action. The relationship between the two modes is reciprocal: The narrative of action must develop circumstances through interaction, changing comprehension even as this narrative influences the other so that optimization is achieved in accordance with, rather than in opposition to, the prevailing environment.

When the United States re-constructed its comprehension of the post-9/11 world through the transformation of probability and certainty, it inadvertently developed a closed narrative. This allowed the *sense* of certainty to prevail; in this condition, there is little incentive to conduct further observation as a means to enhance true comprehension. The nature of this narrative mode was such that it disconnected the government from key allies that might have provided broader perspective and also from internal sources of dissent or perspective that might have led to a set of options that was at once more flexible and more congruent with the international environment. In the absence of such an open narrative of comprehension, the pressure to act directly drove the development of the narrative of action—which evolved out of fears and worst-case scenarios that lacked a firm basis in observation and fact. In such a situation, the

connections that bound various dangers into a single narrative came from heuristic bias—which equated to a narrative of action that was at least as closed as the narrative of comprehension.

The decision to invade Iraq was flawed because it was inconsistent in two out of three respects. Preventative war is anathema to historical norms and the strategic culture of the United States. This action, even if it had been successful under the terms of its inauguration, would have generated severe cognitive dissonance within the American government and populace. In terms of outcome, the total reliance on horizontal connections and the abandonment of the broader perspectives represented by NATO and the Desert Crossing study, among others, virtually insured that the nation's success would run on the heels of luck and fortune. This is in fact what happened, as aspects of reality that would have been readily apparent to careful observation or susceptible to continued containment frustrated expectations: Iraq was *not* in possession of weapons of mass destruction, ethnic and religious tensions *would* lead to civil war, the de-Ba'athification policy did *gut* Iraq's skilled civil administration, etc. While the narratives of comprehension and action were highly compatible, the extreme closure of both actually rendered narrative harmony as a liability.

It would be unrealistic to suggest that Operation Iraqi Freedom was due entirely to a flawed story. At the same time, this approach does account for many of the more seemingly inexplicable or even irrational elements of the decision. To the extent that narratives provide connection and bring context into contact with objective reality, they possess a very real ability to shape American strategy. The more complex the circumstance, and the more emotionally fraught, the more likely it is that the structure of the narrative will influence perceptions and, hence, decisions. Perhaps the best way to protect against this is to keep a simple question always in sight: "What is the counter narrative?"

APPENDIX A

SECRET *u*

Desert Crossing Seminar (U)



After Action Report (U)

June 28-30, 1999

Classified by: CINC USCENTCOM/Multiple Sources
Reason: 1.5A
Declassify on: X4

SECRET *u*

Declassified by BGen G. J. Trautman, Jr, USMC, Deputy J5, USCENTCOM
Date: 2 July 2004
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SECRET 66

Executive Summary (U)

6 (S) On June 28-30, 1999, the United States Central Command (USCENTCOM) sponsored the Desert Crossing Seminar to identify interagency issues and insights on how to manage change in a post-Saddam Iraq. The Seminar structure focused the participants on crucial interagency issues that would bear on the situation, as well as interagency interests and responsibilities. USCENTCOM briefed a draft plan, known as "Desert Crossing," to participants for discussion of the proposed phases and concepts, as well as the risks, threats, opportunities, and challenges that are likely to be present under those conditions. Over 70 participants, including the Department of State, Department of Defense, National Security Council, and the Central Intelligence Agency took part in the seminar.

u (S) Participants were organized into various teams to facilitate the development of insights, but were not asked to "solve" the problems. In fact, there was a consensus that this seminar should be the beginning of much more robust discussions. The observations below summarize participant views and suggest matters for further deliberation. These views do not represent consensus of the individual participants, the various Departments, agencies, or entities, or the U.S. Government.

Deliberate planning needs to become interagency (S) 66

• u (S) Political/Military planning should begin immediately.

u (S) The dimensions of preparing a post-Saddam policy for Iraq and the region are vast and complex. Early preparation of a political-military plan as called for in Presidential Decision Directive 56 should be a priority. The accompanying policy debate will expose a variety of contentious positions that must be reconciled and managed. Key discussion points include: benefits and risks associated with various strategic options; information requirements; and the likelihood that intervention will be costly in terms of casualties and resources.

• u (S) Regime crisis may require rapid U.S. action on short notice.

u (S) When the crisis occurs, policy makers will have to deal with a large number of critical issues nearly simultaneously, including demonstrating U.S. leadership and resolve, managing Iraq's neighbors, and rapid policy formulation. Successfully doing so depends on identifying "Red Lines," the crossing of which is likely to lead to U.S. reaction, in order to facilitate crisis planning. Such Red Lines may include large-scale humanitarian crisis, use (or imminent use) of Weapons of Mass Destruction (WMD), or imminent Iraqi attack on a neighboring state.

u • (S) Regime change may not enhance regional stability.

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u (S) A change in regimes does not guarantee stability. A number of factors including aggressive neighbors, fragmentation along religious and/or ethnic lines, and chaos created by rival forces bidding for power could adversely affect regional stability. Even when civil order is restored and borders are secured, the replacement regime could be problematic—especially if perceived as weak, a puppet, or out-of-step with prevailing regional governments. These consequences must not be ignored during political-military planning.

• u (S) WMD issues warrant additional attention.

u (S) Participants concluded that U.S. policy in reaction to the use of WMD against U.S. personnel or allies was clear. However, U.S. policy on the possibility of Iraqi use of WMD under other circumstances is ill defined and probably does not address the full range of situations. For example, how should the United States respond to an Iraqi faction that employs WMD against a competing faction or a non-coalition or non-ally neighbor? Although the likelihood of WMD use by Iraq was hotly debated, planners and policy makers should review potential WMD situations now to determine the scale, scope, and nature of such use and the likely U.S. response.

Management of Iran is critical to mission success (S) u

• u (S) Iran's anti-Americanism could be enflamed by a U.S.-led intervention in Iraq.

u (S) Iran has substantial interests in developments in Iraq, perhaps its most bitter rival in the region, nor have relations with the United States been any better. The influx of U.S. and other western forces into Iraq would exacerbate worries in Tehran, as would the installation of a pro-western government in Baghdad. More than any other country in the region, the principals were most concerned by how Iran would respond to a U.S.-led intervention in Iraq.

• u (S) Iran possesses the ability to raise the costs and consequences of intervention.

u (S) Many participants felt that Washington should attempt to leverage the crisis to improve the present U.S.-Iran relationship. They believe the worst-case scenario is one in which Iran feels pressured and lashes out asymmetrically in moves that range from harassment of U.S. forces to terrorist attacks. Such attacks will likely shake U.S. determination and perhaps undermine public and political will. To preclude this, the United States and its partners should ensure that Iran does not support counterproductive activities in Iraq and should engage Tehran in a productive fashion wherever possible.

• u (S) Lifting sanctions on Iran may be part of a full Iraq policy.

u (S) Whether the lifting of U.S. sanctions on Iran will be required to gain Tehran's cooperation is unclear. Some participants expressed the view that the United States should use the possibility of lifting them as an incentive for Iranian cooperation. Other participants expressed concern as to how to control Iran in the long term if it continues its support for

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terrorism, continues WMD programs, and/or exports its revolutionary principles to other countries in the region once sanctions are lifted.

Ambiguous role of Iraqi opposition clouds U.S. policy development (S) u

- u (S) Lack of information on internal Iraqi opposition conditions severely hampers contingency planning.

u (S) The United States lacks sufficient information on individuals and groups within Iraq to plan for, or respond to, Saddam's departure. Information for planning and to facilitate dialog with key internal groups or individuals is currently lacking; the United States does not have a clear understanding of their policies and agendas. The intelligence community should initiate actions to determine potential Iraqi leadership groupings that might "naturally" evolve when Saddam departs and to establish the basic criteria and conditions under which such individuals or groups should be approached.

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- u (S) Iraqi exile opposition weaknesses are significant.

u (S) The debate on post-Saddam Iraq also reveals the paucity of information about the potential and capabilities of the external Iraqi opposition groups. The lack of intelligence concerning their roles hampers U.S. policy development. Although participants disagreed as to whether exiled opposition leaders could be useful during the regime transition period, there was no dispute that if the United States were to support them, much must be done in order for these groups to be politically credible within Iraq.

- u (S) The United States should be prepared to initiate, on short notice, a dialog with leaders of key ethnic groups within Iraq.

u (S) A variety of power struggles might occur during the early stages of a post-Saddam crisis. Because events are likely to occur rapidly, consideration should be given now to individuals and groups and their policies and agendas in order to develop a range of options. To this end, the United States should initiate, or at least prepare to initiate, dialogs with key leaders in the PUK, KDP, and Shia tribes as early possible.

Coalition dialogue should begin immediately (S) u

- u (S) Active support from coalition partners is critical to mission success.

u (S) There are many unknowns as to how potential partners think about coalition participation. To facilitate rapid reaction, the United States must begin the process of planning for coalition operations and developing the basis for a coalition now. The risks to U.S. regional interests are too high and events are likely to unfold too rapidly to wait until the crisis begins.

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- ^u(S) Differing visions of a unified Iraq complicate end-state articulation.
 - ^u(S) The seminar demonstrated that there are differing visions of what a post-Saddam Iraq should look like to various coalition partners. These differences will complicate developing a common coalition end state, much less reaching consensus on such a state. This will delay coalition formation during the critical early stages of the crisis and may complicate exit strategies.
 - ^u(S) Arab coalition may undermine accomplishment of U.S. policy objectives.
 - ^u(S) A paradox exposed during the Seminar is that while an Arab coalition will be required for legitimacy in the region, such a coalition may make it more difficult for the United States to attain its objectives. Solutions envisioned by U.S. coalition partners (especially our Arab partners) may be significantly different than those envisioned by U.S. planners. For example, the Iraq Liberation Act specifies a democratic outcome that contrasts starkly with the predilections of some Arab governments. Also, some participants believe that no Arab government will welcome the kind of lengthy U.S. presence that would be required to install and sustain a democratic government.
 - ^u(S) A long-term, large-scale military intervention may be at odds with many coalition partners.
 - ^u(S) The nature of the region's relationships with the United States and other western nations in the post-intervention era are likely to be vastly different. What participants referred to as the "Japanese Option," (long-term presence and directed change) is not likely to be well received by coalition partners. Changes that could result from intervention at various levels will involve political and military relationships; religious and ethnic conflicts; economic relations; and differing views of social justice. While differences with Arab allies concerning the U.S. presence in the region were managed reasonably well in the past (owing in part to common threats), intervention in Iraq may alter the way these relationships are handled dramatically enough to produce new frictions and conflicts.
- Iraq's economic viability is key to long term regional stability (S) u
- ^u(S) Iraqi stabilization requires debt/claims forgiveness.
 - ^u(S) Mounting a large intervention will be costly, as regional partners may not be willing to reimburse the United States to the extent that they have in the past. One possibility, using Iraqi oil revenues to pay for the intervention, would come at the expense of long-term reconstitution and may affect regional and global economic stability if oil prices fluctuate too rapidly. Also, Iraq still faces claims estimated at \$300 billion as a result of its 1990 invasion of Kuwait. If these claims are relentlessly pursued, economic recovery, and thus stability, may be delayed. Policymakers in the United States and abroad should investigate debt and claims forgiveness, as a stable Iraq can evolve only if it is economically viable.

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- ^u(S) The relaxation of economic sanctions early in the crisis may be a key determinant in the ability of the United States to influence events in Iraq.

• ^u(S) Some seminar participants believed that one of the most important things the United States could do to improve its image in the eyes of the Iraqi people would be the announcement of immediate lifting of economic sanctions early in the transition crisis. The United States should expect immediate pressure from others, including coalition members, to lift sanctions, even while the outcome of the internal Iraqi situation is unclear. Seizing the "high ground" and immediately lifting the sanctions upon a change in the Iraqi regime—even if its policies and orientation are unknown—might be advantageous for U.S. interests.

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END NOTES

ⁱ Bernard Brodie. *War and Politics*. (New York: MacMillan, 1973): 276.

ⁱⁱ Michael Polanyi. *Personal Knowledge: Towards a Post-Critical Philosophy*. Corrected Edition. (London: Routledge, 1962).

Polanyi critiqued the notion of objectivity. He suggested that no knowledge is entirely objective, but that the questions one asks and the methods by which one investigates those questions are highly subjective. They are based on a person's history, experience, culture, beliefs, etc. Polanyi terms this cognitive substrate "tacit knowledge." He illustrates this concept as follows:

While I read the letter, I was consciously aware both of its text and of the meaning of the text, but my awareness of the text was merely instrumental to that of the meaning (Kindle LOC 2126)... Even *while* listening to speech or reading a text, our focal attention is directed towards the meaning of the words, and not towards the words as sounds or as marks on paper (Kindle LOC 2134)... But words convey nothing except by a previously acquired meaning, which may be somewhat modified by their present use, but will not as a rule have been first discovered on this occasion (Kindle LOC 2136)... When I ponder the message of the letter, I am subsidiarily aware not only of its text, but also of all the past occasions by which I have come to understand the words of the text. (Kindle LOC 2140)

But Polanyi, recalling Karl Popper, does have faith in objectivity: "Only affirmations that could be false can be said to convey objective knowledge..." (Kindle LOC 50) This objectivity is the domain of "focal knowledge," which is, in the long extract immediately above, the "meaning of the words." Focal knowledge, developing on a tacit substrate, is objective content, which can be shared between individuals in a more or less constant and intact manner. "Tacit knowledge," being subjective, is interpretive and ordinarily be articulated as an objective and universal condition.

ⁱⁱⁱ Colin S. Gray. "Strategic Culture as Context: the First Generation of Theory Strikes Back." *Review of International Studies* (1999), 25:

Culture 'is a description of a particular way of life which finds expression in institutions and ordinary behaviour [sic].' In other words, culture is ideals, it is the evidence of ideas, and it is behaviour [sic]. 52.

^{iv} Thomas Kuhn. *The Structure of Scientific Revolutions*, 3rd Edition. (Chicago, University of Chicago Press, 1996):

Close historical investigation of a given specialty at a given time discloses a set of recurrent and quasi-standard illustrations of various theories in their conceptual, observational, and instrumental applications. These are the community's paradigms." (Kindle LOC 739)

^v Paul Wolfowitz. "Managing Our Way to a Peaceful Century." *Managing the International System Over the Next Ten Years: Three Essays*. (New York: Trilateral Commission, July 1997): p53.

^{vi} When states fail to adapt to circumstances, the resulting dissonance can, over time, lead to a crisis or challenge of environmental proportion. Especially effective adaptation can also serve to mitigate or delay environmental crisis or challenge—but I do not think it can stave off environmental change indefinitely. There is a possible corollary in the idea that adaptation is based more on a state's desire and need while evolution is grounded on external change that a state can rarely control or plan. On a "change spectrum," adaptation would thus contain some elements of inevitable change and evolution would incorporate elements of choice—but the preponderance of influence is as described.

^{vii} The prisoners' dilemma is a fundamental construct of game theory. Essentially, it offers scenarios in which two "players" must interact in a problem in which they choose either to cooperate or defect. One player cooperates while the other defects, both cooperate or both defect. This scopes the range of possible outcomes. The player who defects when the other cooperates obtains the best outcome—this player "gains" the most. The worst outcome for both players has both defecting; when both players cooperate, they gain, but not as much as when only one defects. Thus, there is always a temptation to pursue strategies of exploitation that allow for maximum return—but only amidst the prospect of possible loss. This is interesting to game theorists and students of international relations because it allows them to study whether cooperation or competition produce the greatest gains.

^{viii} Robert Axelrod. *The Complexity of Cooperation: Agent-Based Models of Competition and Collaboration*. (Princeton: University of Princeton Press, 1997): 25.

^{ix} *The Complexity of Cooperation:*

As the simulations have shown, the premises became fixed quite early. This meant a commitment to which parts of the chromosome would be consulted in the first few moves, and this in turn meant giving up flexibility as more and more of the chromosome evolved on the basis of what had been fixed. (25)

^x The Kosovo War is an example of expanded NATO cooperation—although final success was questionable. Some of the actions undertaken by Italian forces in Somalia illustrate the complications arising from post-Cold War participation in the alliance. (See Mark Bowden. *Black Hawk Down*. (New York, Atlantic Monthly Press, 1999): 206.

^{xi} *Structure of Scientific Revolution:*

If awareness of anomaly plays a role in the emergence of new sorts of phenomena, it should surprise no one that a similar but more profound awareness is prerequisite to all acceptable changes of theory. (Kindle LOC 1070-77)

Furthermore... the awareness of anomaly had lasted so long and penetrated so deep that one can appropriately describe the fields affected by it as in a state of growing crisis. (Kindle LOC 1077-84)

...a novel theory emerged only after a pronounced failure in the normal problem-solving activity.... That breakdown and the proliferation of theories that is its sign occurred no more than a decade or two before the new theory's enunciation. The novel theory seems a direct response to crisis. (Kindle LOC 1185-92)

^{xii} A few: net-centric warfare, precision fires, command-and-control warfare, small & fast formations

^{xiii} Led by politicians such as Gary Hart and Newt Gingrich, with intellectuals such as John Boyd and Bill Lind as its spiritual fathers; sought to drive force structure by conceptual and strategic requirements rather than overly complex and expensive procurement programs.

^{xiv} Expressed by politicians as an increasingly positive view of unilateralism over the decade prior to 9/11.

^{xv} National Security Council. *The National Security Strategy of the United States of America*. (Washington D.C., National Security Council, February 1995): "This is a period of great promise but also great uncertainty..." (1)

^{xvi} During the Cold War, deterrence had been based on two roughly co-equal premises: strength and ambiguity. Ambiguity was used to create uncertainty and misdirection:

Kissinger, too, saw advantages in projecting uncertainty, but from a more theoretical point of view. His famous 1957 book, *Nuclear Weapons and Foreign Policy*, had argued eloquently for a strategy based on ambiguous threats; a decade later, he had noted that for the purposes of deterrence, "a bluff taken seriously is more useful than a serious threat taken as a bluff" (*Strategies of Containment*, 300)

President Clinton implicitly acknowledged the post-Cold War shift away from this strategic shell game. The word "deterrence" remained in his lexicon, but its meaning subtly shifted away from targeted ambiguity:

Our forces must be able to help offset the military power of regional states with interests opposed to those of the United States and its allies. To do this, we must be able to credibly deter and defeat aggression, by projecting and sustaining U.S. power in more than one region if necessary. (National Security Council. *The National Security Strategy of the United States of America*, Washington D.C., National Security Council, February 1995: 8.)

Deterrence, in the post-Cold War world, meant maintaining a strong military capability in order to back initiatives with a credible threat of force. This is a far more general application; deterrence in this context becomes a universal prerequisite rather than a specific strategic way of operating toward a specified end.

^{xvii} Reference Michael Polanyi's distinction between the knowledge of letters as discrete shapes, of paper and ink and all the other personalized background information that enables us to read a text. Contrast this with the objective fact of the text's content—what it means—as the component of information that can be reliably and reproducibly transmitted.

^{xviii} Frank Kermode. *The Sense of an Ending: Studies in the Theory of Fiction*. (New York: Oxford U.P., 1967): 127.

^{xix} "The Black Swan," 63.

^{xx} In *Mimesis* (cite. immediately below), Erich Auerbach describes the story of Abraham and Isaac (Genesis, Ch 22) as being what I would term "open," and the return of Odysseus to Ithaca, and the recognition of his scar (Odyssey, Bk 19), as "closed."

^{xxi} Erich Auerbach. *Mimesis: The Representation of Reality in Western Literature*. Trans. Willard R. Trask. (Princeton: Princeton University Press, 1991): 11-12.

^{xxii} *Mimesis*: 11.

^{xxiii} *The 1% Doctrine*, 62. See also:

Robert Windrem. "Pakistan's Nuclear History Worries Insiders." MSNBC, November 6, 2007. <http://www.msnbc.msn.com/cleanprint/CleanPrintProxy.aspx?1297202866383> :

Al Qaeda's top leaders, including Osama bin Laden, met with Pakistani nuclear scientists in Afghanistan just before September 11 and offered the group advice on how to build a crude nuclear device

^{xxiv} *The 1% Doctrine*, 189.

^{xxv} Nassim Nicholas Taleb. *The Black Swan: the Impact of the Highly Improbable*. 2nd Edition. (New York: Random House, 2010):

A Black Swan (and capitalize it) is an event with the following three attributes.

First, it is an *outlier*, as it lies outside the realm of regular expectations, because nothing in the past can convincingly point to its possibility. Second, it carries an extreme impact (unlike the bird). Third, in spite of its outlier status, human nature makes us concoct explanations for its occurrence *after* the fact, making it explainable and predictable. (xxii)

^{xxvi} *Personal Knowledge*: "Probability statements can never be strictly contradicted by experience, even if we assume that all external perturbations and all observational errors are entirely eliminated." (Kindle LOC 629)

^{xxvii} Two of Bush's statements in *Decision Points* demonstrate his commitment to the logic of the Black Swan:

The axis I referred to was the link between the governments that pursued WMD and the terrorists who could use those weapons. There was a larger point in the speech that no one could miss: I was serious about dealing with Iraq. (233)

In terms of an observable fact, there was no such link beyond sporadic contact. Bush's understanding of the worst case, the Black Swan, provided cause to act as if such a case were near certain.

We all knew that intelligence is never 100 percent certain; that's the nature of the business. But I believed that the intelligence on Iraq's WMD was solid. If Saddam didn't have WMD, why wouldn't he just prove it to the inspectors? (268)

This statement shows that the President operated, at least intuitively, in terms of the "null hypothesis." Believing that Iraq possessed such weapons, the null hypothesis would provide the means to assess confidence in the hypothesis. The unifying theme within his statement is that the impossibility of proving a negative outcome is the essence of the problem of induction; the President, while closing the door on a mathematically sound use of induction and probability, nonetheless avails himself of the feelings associated with inductive analysis. This is a quintessentially narrative act in that it creates connections; it is equally flawed in that those connections are not valid.

^{xxviii} 2002 National Security Strategy, 2 of Preface.

^{xxix} "A Balance of Power That Favors Freedom." *U.S. Foreign Policy Agenda*. (December 2002) (<http://usiraq.procon.org/view.additionalresource.php?resourceID=000686>)

^{xxx} *Decision Points:*

The United States would consider any nation that harbored terrorists to be responsible for the acts of those terrorists. This new doctrine overturned the approach of the past, which treated terrorist groups as distinct from their sponsors. We had to force nations to choose whether they would fight the terrorists or share in their fate. And we had to wage this war on the offense, by attacking the terrorists overseas before they could attack us again at home. (136)

^{xxxi} The call to action was a pervasive element of Bush's own statements:

2002 State of the Union:

Some governments will be timid in the face of terror. And make no mistake about it; If they do not act, America will... We'll be deliberate; yet, time is not on our side. I will not wait on events while dangers gather. I will not stand by as peril draws closer and closer. The United States of America will not permit the world's most dangerous regimes to threaten us with the world's most destructive weapons.

2002 West Point Graduation:

We cannot defend America and our friends by hoping for the best. We cannot put our faith in the word of tyrants, who solemnly sign non-proliferation treaties, and then systemically break them. If we wait for threats to fully materialize, we will have waited too long.

2002 Iraq Speech to U.N.:

To assume this regime's good faith is to bet the lives of millions and the peace of the world in a reckless gamble. And this is a risk we must not take... The first time we may be completely certain he has nuclear weapons is when, God forbid, he uses one... If Iraq's regime defies us again, the world must move deliberately and decisively to hold Iraq to account. The purpose of the United States should not be doubted. The Security Council resolutions will be enforced—the just demands of peace and security will be met—or action will be unavoidable.

^{xxxii} *Decision Points:* 269.

^{xxxiii} Walter Russell Mead. *Special Providence: American Foreign Policy and How It Changed the World*. (New York: Routledge, 2002): 34.

^{xxxiv} *Ibid:*

The American foreign policy process violates basic Continental ideas about foreign policy in other important ways. The first is the constitutional process, a process designed to create a clunky, shuddering machine that lunges forward in fits and starts, one that is always divided against itself, with half the government almost always investigating the dirty laundry of the other. If that were not enough, the Constitution is designed to highlight the influence of local and parochial interests in the foreign policy process. (41)

^{xxxv} “Promoting the National Interest:”

The Clinton administration witlessly accelerated and deepened these cuts. The results were devastating: military readiness declined, training suffered, military pay slipped 15 percent below civilian equivalents, morale plummeted, and the services cannibalized existing equipment to keep airplanes flying, ships afloat, and tanks moving. (50)

^{xxxvi} “Decisionmaking in Operation Iraqi Freedom,” 10: “...the administration was initially dominated by the sort of conservative realism seen in the senior Bush’s administration.”

^{xxxvii} Taleb helps one to understand his Extremistan as follows:

Consider by comparison the net worth of the thousand people you lined up in the stadium. Add to them the wealthiest person to be found on the planet—say, Bill Gates, the founder of Microsoft. Assume his net worth to be close to \$80 billion—with the total capital of the others around a few million. How much of the total wealth would he represent? 99.0 percent? Indeed, all the others would represent no more than a rounding error for his net worth, the variation of his personal portfolio over the past second. (*The Black Swan*: iBooks 84)

^{xxxviii} “Rice on Iraq War and Politics.” *Online News Hour*. (September 25, 2002):

http://www.pbs.org/newshour/bb/international/july-dec02/rice_9-25.html

^{xxxix} Condoleezza Rice. *CNN’s Late Night With Wolf Blitzer*. (September 8, 2002)

<http://usiraq.procon.org/view.additional-resource.php?resourceID=000686>

^{xl} *Key Judgments from October 2002 NIE*: “The activities we have detected do not, however, add up to a compelling case that Iraq is currently pursuing what INR would consider to be an integrated and comprehensive approach to acquire nuclear weapons.” (4-5)

^{xli} *Decision Points*: 268.

^{xlii} Donald Rumsfeld. *NATO Press Conference*. June 6, 2002.

<http://www.nato.int/docu/speech/2002/s020606g.htm>

^{xliii} The logic of Rumsfeld’s statement may best be formalized as “~e ≠ e,” where “e” is evidence.

^{xliv} Donald Rumsfeld. *Known and Unknown*. (New York: Sentinel, 2011): xiii (Author’s Note)

^{xl v} Pat Pentland. “Center of Gravity Analysis and Chaos Theory.” *Coping with Bounds: Speculations on Nonlinearity in Military Affairs*. Ed. Tom Czerwinski. (Washington D.C.: NDU Press, 1998) 268:

...Political force arises from the constant redistribution of wealth and power in society. Diplomatic force simply represents the redistribution of wealth and power outside the boundaries of a society. Economic force is the production and exchange of goods and services... These forces constitute the primary “strange attractors” in human culture and the boundaries between each of them is [sic] closely interwoven. This blurring makes it sometimes difficult to distinguish between the elements of pure force.

“Strange attractor” is a term of art from Chaos Theory. It denotes the non-linear patterns that evolve in complex systems when variables within discrete parts of the system cannot be isolated from each other.

^{xlvi} 2002 National Security Strategy, 15. It would be more accurate to say his intention was to enact preventatively—to strike based on the adversary’s intention rather than on the imminence of his attack.

^{xlvii} Readers are invited to research references to “Team B.” This was an effort undertaken during the 1970s to develop an alternative understanding of Soviet intentions. This group saw the U.S.S.R. as extremely aggressive and inclined to initiate nuclear war. They had a significant influence on American strategy going into the Reagan presidency—but subsequent events proved them almost entirely mistaken in their assessment.

^{xlvi} See NATO web page at <http://www.nato.int/docu/update/2008/09-september/e0911a.html>

^{xliv} Bob Woodward. *State of Denial*. (New York: Simon & Schuster, 2006): 24-25.

Bandar said that moving forward on the peace process between the Palestinians and Israel, which had just elected Ariel Sharon its new leader, was critical to building a coalition of moderate Arabs to pressure Saddam Hussein... Bush seemed to agree. “If there is any military action, then it has to be decisive. That can finalize the issue,” the president said.

ⁱ “Known Unknowns,” 5-6.

ⁱⁱ *The Black Swan*. (iBooks, 27)

ⁱⁱⁱ Thomas S. Kuhn. *The Structure of Scientific Revolutions*, 3rd Edition. (Chicago, University of Chicago Press, 1996).

See also:

John R. Boyd. *Destruction and Creation*. (September 3, 1976) at <http://www.scribd.com/doc/12627002/Destruction-and-Creation-by-John-Boyd>

^{lii} Referring to North Korea, Iran and Iraq, President said, in his State of the Union Address, “States like these and their terrorist allies constitute an axis of evil, arming to threaten the peace of the world. By seeking weapons of mass destruction, these regimes pose a grave and growing danger. They could provide these arms to terrorists.”

^{liv} “Decision Points,” Kindle LOC 4533.

^{lv} *The One Percent Doctrine*, 212.

^{lvi} *Shrewd Sanctions*:

Overall, the sanctions regime in place and the tools used in conjunction with it were best suited to the goal of containing the regime. It is therefore not surprising that the greatest achievement of sanctions and U.S. policy over this period fall into the realm of containment. (155)

^{lvii} Amos Tversky & Daniel Kahneman. “Judgment under Uncertainty: Heuristics and Biases.” *Science* 185 (27 September 1974): 1127.

^{lviii} *On War*: “Among alliances, it [the center of gravity] lies in the community of interest, and in popular uprisings it is the personalities of the leaders and public opinion. It is against these that our energies should be directed.” (“Closer Definition of the Military Objective: The Defeat of the Enemy,” 720.)

^{lix} *Judgment under Uncertainty*: 1127

^{lx} *The One Percent Doctrine*: “In a briefing with George Tenet on September 19, he and the Vice President made a more formal run at the issue. ‘I want to know about links between Saddam and al Qaeda,’ Bush said to Tenet.” (23)

Plan of Attack: In an interview two years after September 11, Bob Woodward wrote “It changed his attitude ‘toward Saddam Hussein’s capacity to create harm,’ he said adding that ‘keeping Saddam in a box looked less and less feasible to me.” (Kindle LOC 480)

^{lxi} John F. Burns and Alan Cowell. “Blair Testifies Before British Inquiry Into Iraq War.” *New York Times*, January 21, 2011:

But he [Tony Blair] acknowledged that, while British policy did not speak specifically of regime change, the notion of ousting Saddam Hussein had long been an American priority and he had discussed it with President Bush in a telephone conversation in December 2001.

‘Regime change was their policy so regime change was part of the discussion,’ he said. ‘If it became the only way of dealing with this issue, we were going to be up for that.

^{lxii} “Judgment under Uncertainty,” 1127.

^{lxiii} Richard Clarke was the NSC national coordinator for security and senior counter-terrorism advisor.

^{lxiv} *The One Percent Doctrine*, 23.

^{lxv} “Judgment under Uncertainty,” (1129)

^{lxvi} *Ibid*: (1129)

^{lxvii} *Ibid*:

In many situations, people make estimates by starting from an initial value that is adjusted to yield the final answer. The initial value, or starting point, may be suggested by the formulation of the problem, or it may be the result of a partial computation. In either case, adjustments are typically insufficient. That is, different starting points yield different estimates, which are biased toward the initial values. We call the phenomenon anchoring. (1128)

^{lxviii} *Ibid*, 1129.

^{lxix} *Ibid*: “People tend to overestimate the probability of conjunctive events.” (1129)

^{lxx} *Ibid*, (1128).

^{lxxi} *Plan of Attack*: In September 2002, the CIA produced a national intelligence estimate that reported, among other things, “under key judgments, without qualification, ‘Baghdad has chemical and biological weapons.’” (Kindle LOC 3108). Although this NIE was issued almost a year to the day after al Qaeda’s attacks, it was released prior to the invasion and represents the agency’s opinion at a time when no significant intelligence regarding Iraq had been released since September 11, 2001.

^{lxxii} It is worth noting that the exact sequence of events as they played through the minds of the President, Vice-President, Secretary of Defense and others cannot be known with surety. The irreducible sequence was 1) al Qaeda seeks WMD; 2) Iraq has WMD; 3) Iraq gives WMD to al Qaeda; 4) al Qaeda uses WMD on the United States. The important point is that the decision to invade Iraq was driven by this baseline sequence, with or without additional steps in between or

after. There are a variety of further “events” or steps that could take a subject from the attacks of September 11, 2001 to the nexus of terror and rogue states; different minds within the Bush administration could even have developed independent narratives with unique events—as long as the four baseline events were present, a common understanding would evolve and the bias would still function in essentially the same way.

^{lxxiii} Amos Tversky & Daniel Kahneman. “Prospect Theory: An Analysis of Decision Under Risk.” *Econometrica*, 47, no 2 (March 1979): 263. Tversky and Kahneman won the 2002 Nobel Prize in Economics for this research.

^{lxxiv} Amos Tversky & Daniel Kahneman. “The Framing of Decisions and Psychology of Choice.” *Science*, vol. 211, 4481. (Jan. 30, 1981), 453.

^{lxxv} Bob Woodward. *Plan of Attack*. Kindle Edition. (New York: Simon & Schuster, 2004): Kindle LOC 3762.

^{lxxvi} *Decision Points*: “Khalid Sheikh Mohammad... disclosed plans to attack American targets with Anthrax and directed us to three people involved in the al Qaeda biological weapons program.” (Kindle LOC 3371)

^{lxxvii} *Ibid*, Kindle LOC 2599; Woodward cites Cheney using this argument several times throughout the book—in this case it is specifically in reference to invading Iraq.

^{lxxviii} “Prospect Theory,” 455-456: “The Framing of Contingencies.” Tversky and Kahneman created “problems” presenting choices in which probability of outcomes was consistent, but hidden by the structure of the question. A truly rational choice in each problem, in terms of probability, should thus have been consistent across respondents. It wasn’t. The researchers cite two phenomena, which they label the “certainty effect” and “pseudocertainty.” The certainty effect works when “a reduction of the probability of an outcome by a constant factor has more impact when the outcome was initially certain than when it was merely probable.” (Certainty leads to risk-averse behavior and uncertainty leads to risk-taking behavior.) Pseudocertainty is similar, but leads to favoring apparently certain outcomes, where the certainty is illusory because it is contingent upon a chance prior outcome.

^{lxxix} Walter Russell Mead. *God and Gold: Britain, America, and the Making of the Modern World*. (New York: Vintage Books, 2007):

The United States supports, however inconsistently, a political and social philosophy based on free choice and private property, tolerance among religions founded in Protestant Christian values, and the idea that individuals—including women—have inalienable and equal rights which states must observe and protect. The United States is both a conservative power, defending the international status quo against those who would change it through violence, and a revolutionary power seeking to replace age-old power structures with market economics and democratic ideals. (11-12)